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September 12, 2011

Reference No. 054046

Mr. David Garrett
U.S. Environmental Protection Agency, Region 7
Air and Waste Management Division
RCRA Corrective Action & Permits Branch
901 N. Fifth Street
Kansas City, Kansas 66101

**VIA E-MAIL &
FEDEX COURIER**

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Dear Mr. Garrett:

Re: Response to U.S. EPA's Comments
Occidental Chemicals' Proposed
Groundwater Monitoring Program and e:DAT Recommendations
Occidental Chemical Corporation
6200 S. Ridge Road, Wichita, Kansas
RCRA ID# KSD007482029

Conestoga-Rovers & Associates (CRA), on behalf of Occidental Chemical Corporation (OCC), has prepared responses to the United States Environmental Protection Agency (U.S. EPA) comments detailed in your letter dated August 11, 2011 For ease of your review, U.S. EPA's comments are reiterated below in italic print, followed by CRA's response.

General Comment:

1. *On March 08, 2011, OCC emailed EPA a table that listed "Action Items" for their monitoring and extraction wells. These action items are maintenance activities for these wells such as repairing concrete pads, filling annular spaces, repairing bladders and/or o-rings, painting, repairing stuck pumps, etc. Please provide EPA a schedule and the prioritization of these well maintenance action items.*

   Response

   Agreed. A schedule for the identified well maintenance items will be developed and submitted to U.S. EPA prior to the next semiannual groundwater monitoring event currently scheduled for November 2011.

2. *There are several wells that are not listed in the eDat database although there is historical information available such as limited analytical data, documented attempts to sample, water levels, well logs, documentation showing that these wells were properly abandoned, etc. The following wells are missing from eDat: MW02S3SS, MW9S4, MW13S4, MW14S4, MW18S4, MW23S4 and MW27S3. There may be*

3. *additional older wells at the facility (e.g., water wells used for operations), wells that historically had been plugged and abandoned (e.g., old injection wells), etc. Please add into eDat: all historical data (detections & non-detections), sampling dates, well logs, and anything regarding any well (regardless of type) that is not currently in eDat.*

Response

Agreed. To the extent data for the identified wells are available electronically, they will be added to the next e:DAT update.

3. *Please add into eDat information on all historical and current Underground Injection Control (UIC) Wells. The facility UIC wells are considered solid waste management units on the facility's RCRA permit, so it would be helpful to include this information in eDat. This includes UIC wells that are currently in operation and those that have been plugged and abandoned.*

Please also include information such as well logs, photos, Kansas Department of Health and Environment (KDHE) approvals for well abandonment, and any other documentation such as known problems with specific wells during the ownership of Frontier Chemicals, Vulcan Chemicals, Basic Chemicals and Occidental Chemicals.

Response

Agreed. The next update to e:DAT will include the location of existing operational and abandoned UIC wells. In addition, well logs, photos, and KDHE approvals for well abandonment, etc. will be included.

Specific Comments:

1. *Abandonment of MW18S1, MW19S1, and MW27S1. The revised Groundwater Monitoring Program proposes abandonment of MW018S1, MW019S1, and MW027S1. The reason provided for abandoning these wells-absence of double casings on source area wells screened in the lower S1 aquifer-is sound. However, this proposal would eliminate all S1 wells in the northwest half of the OCC plant. The Groundwater Monitoring Program must be revised to include at least one properly cased replacement S1 monitoring well in the northwest portion of the plant.*

Response

Agreed; however, the final location and construction details of a replacement monitoring well will be selected following completion of the on-Site groundwater investigation program which is anticipated to be initiated by the third calendar year quarter of 2012.

2. *Abandonment ofMW16S4. The revised Groundwater Monitoring Program proposes abandonment ofMW016S4. The reason provided for abandoning this well - damage preventing sampling - is sound. However, this well is located at the plant boundary and could provide source release information. The nearest S4 well, MW015S4, is approximately 1,300 feet to the south. The Groundwater Monitoring Program must be revised to include a replacement S4 monitoring well at the southeast corner of the plant.*

Response

Agreed. Please see the response to Specific Comment No. 1.

3. *Abandonment of MW16S2PVC. The revised Groundwater Monitoring Program indicates that the rationale for changing the sampling frequency of MW016S2PVC is abandonment of a duplicate location (see Column AD). However, the proposed sampling frequency is identified as annual (see Column C). The Groundwater Monitoring Program must be revised to indicate that MW016S2PVC will be abandoned in Column C.*

Response

Agreed. Please see the attached Groundwater Monitoring Plan table.

4. *Abandonment of MW28S3. The revised Groundwater Monitoring Program indicates that MW028S3 should be omitted because the S2/S3 aquifer is monitored by an adjacent monitoring well (MW028S2) at this location. Recent historical data indicate numerous detections and exceedances of EPA Maximum Contaminant Levels (MCLs) or EPA Regional Screening Levels (RSLs) in MW028S2 and MW028S3. Also, EPA notes that carbon tetrachloride exceeded its EPA MCL in 16 samples collected from MW028S3 but this constituent did not exceed the MCL in samples collected from MW028S2. The Groundwater Monitoring Program must be revised to retain both MW028S2 and MW028S3 since detections in the wells are not similar as inferred.*

Response

Agreed. Please see the attached Groundwater Monitoring Plan table.

5. *Abandonment of MW29S3. The revised Groundwater Monitoring Program indicates that MW029S3 should be omitted because the S2/S3 aquifer is monitored via an adjacent monitoring well (MW029S2) at this location. Although more types of compounds were detected in MW029S2, the frequency of detections and MCL or RSL exceedances was greater in MW029S3 than MW029S2. Additionally, chlorinated solvents such as tetrachloroethene and vinyl chloride were more prevalent in MW029S3 than MW029S2. The Groundwater Monitoring Program must be revised to retain both MW029S2 and MW029S3 since the detections are not similar as inferred.*

Response

Agreed. Please see the attached Groundwater Monitoring Plan table.

6. *Omission of MW10S3. The revised Groundwater Monitoring Program indicates that MW010S3 should be omitted because the S2/S3 aquifer is monitored by an adjacent monitoring well (MW010S2) at this location. Recent historical data indicate greater frequency of detections in MW010S2 than in MW010S3. For example, there were 13 carbon tetrachloride detections exceeding the EPA MCL in MW010S2. However, in MW010S3, there was only one vinyl chloride detection exceeding the EPA MCL and 11 beta-BHC detections exceeding the EPA RSL. The Groundwater Monitoring Program must be revised to retain both MW010S2 and MW010S3 since well results are not comparable.*

Response

Agreed. Please see the attached Groundwater Monitoring Plan table.

7. *Omission of MW137S1. The revised Groundwater Monitoring Program indicates that MW137S1 should be omitted because the well is screened in a thin sand seam above bedrock, and because MW137S2 also monitors the S1 aquifer. Recent historical data indicate greater frequency of detections and more MCL or RSL exceedances in MW137S1 than in MW137S2. The Groundwater Monitoring Program must be revised to retain both MW137S1 and MW137S2.*

Response

Agreed. Please see the attached Groundwater Monitoring Plan table.

8. *Omission of AMW03 and AMW104. The revised Groundwater Monitoring Program indicates that AMW003 and AMW104 should be omitted because the wells are screened across multiple stratigraphic units. However, concentrations of beta-BHC in AMW003 exceeded the RSL as recently as 2008, and there would be no wells within 700 feet of AMW003 or AMW104 if these wells were deleted from the monitoring program. The Groundwater Monitoring Program must be revised to include an appropriately screened replacement well nest in the AMW003/AMW104 area.*

Additionally, EPA recognizes that OCC does not own AMW003 or AMW104 and cannot mandate their abandonment. Therefore, it is recommended that Abbott be advised of the potential for these monitoring wells to serve as preferential pathways for contaminant migration between aquifer units and that they be encouraged to properly abandon the wells.

Response

Agreed; however the location and construction details for a replacement well nest in the AMW003/AMW104 area will be selected following completion of the on-Site groundwater investigation program.

Abbott will be advised of OCC's concerns with respect to the construction of AMW003 and AMW104.

9. *Omission of AMW08S, AMW08D, AMW16S, and AMW16D. The revised Groundwater Monitoring Program indicates that the AMW08 and AMW16 well clusters should be omitted because similar monitoring locations are located nearby. Both the AMW08 and AMW16 well clusters are located along the rail line, and there would be no wells within 970 feet of these wells if the wells were deleted from the monitoring program. The Groundwater Monitoring Program must be revised to retain both of these well clusters.*

Response

Agreed. Please see the attached Groundwater Monitoring Plan table.

10. *Abandonment of MW17S3B. The revised Groundwater Monitoring Program indicates that damaged well MW17S3B will be abandoned and that MW17S3A will be used for monitoring. MW17S3A had more detections and more types of compounds detected. EPA also notes that as recently as 2000, beta-BHC was detected in MW17S3B only, at a concentration exceeding its RSL. Additionally, the screened intervals of MW17S3A (67.5-80 feet below ground surface [bgs]) and MW17S3B (38-55 feet bgs) do not overlap. The revised Groundwater Monitoring Program must be revised to include a replacement for MW17S3B since MW17S3A is not screened at equivalent depths.*

Response

Agreed. Please see the response to Specific Comment No. 1.

11. *MW13S4. This well was formerly located with MW13S1 and MW13S3 (these two wells still exist) along the side of Hoover Road. However MW13S4 does not exist on this table and is missing from the semi-annual groundwater reports. Was this well destroyed? Please provide information on the status of this well and add this information into eDat.*

Response

It is understood that MW13S4 was inadvertently destroyed by a local resident prior to 2009.

12. *MW02S3SS. This well was formerly located along 63rd Street and is no longer included in any of the semi-annual groundwater reports. Please provide information on the status of this well and add this information into e:DAT.*

Response

Monitoring well MW02S3SS no longer exists. The next update to eDat will include the status of this well and any other available information.

13. *MW23S4. Please add information regarding this well into eDat. It appears that historically there were few attempts to sample the well, and facility documents state that the well was dry. Otherwise, there is little documentation regarding this well. OCC must attempt to sample this well on an annual basis for all OCC CoCs and document all attempts of future sampling.*

Response

MW23S4 was previously abandoned. All available closure documentation will be added to the next e:DAT update.

14. *MW113S3. Please add into eDat all of the historical benzene, toluene, ethylbenzene, and xylenes (BTEX) data that was collected and sent to KDHE under the underground storage tank (UST) program, along with BTEX data collected for any other well under the UST program.*

Response

Agreed. All data that are available electronically will be added to the next e:DAT update.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Bruce Clegg

BCC/ko/55

cc: Lisa Blair (OCC)
Juan Somoano (GSHI)